

CLAIMS

1. A method of billing services in a communications system, which comprises servers (SPS) of service providers (SPS) and billing servers (BS1-3), which provide billing services, **characterized** in that

5 address data and service attributes of billing services are transmitted in an advertising message over a data transfer network to the service provider's server (SPS),

the service provider's server (SPS) selects one billing service from among advertised billing servers (BS1-3) for the billing transaction of a client according to the parameters given by the client and said service attributes, or
10 offers advertised billing services for the client to select,

the service provider's server (SPS) initiates the billing transaction with the billing server (BS1-3) of the selected billing service by means of said address data and service attributes.

15 2. A method according to claim 1, **characterized** in that said advertising message is sent in response to a billing service request which the service provider's server (SPS) has sent to the telecommunication network and which may include desired service attributes.

3. A method according to claim 2, **characterized** in that the
20 billing service request is sent in response to billing parameters which the client gives when purchasing the service.

4. A method according to claim 1, 2 or 3, **characterized** in that the billing transaction is performed according to the digital payment or billing protocol supported by the selected billing server (BS1-3).

25 5. A method according to claim 1, 2, 3 or 4, **characterized** in that the billing transaction is performed after handshaking and controlled by the billing server (BS1-3) selected.

6. A method according to any one of claims 1 to 5, **character-**
ized in that the billing software of the service provider's server (SPS) is lim-
30 ited to software which enables tracking and selection of a suitable billing server, handshaking with the selected billing server (BS1-3) and functioning as a party in a payment or billing procedure supported by the billing server.

7. A method according to any one of claims 1 to 6, **character-**
ized in that the service provider's server (SPS) configures with the payment
35 or billing protocol supported by the billing server (BS1-3) on the basis of said

service attributes received in the advertising message and/or on the basis of the data, files or software received from the billing server after handshaking.

8. A method according to any one of claims 1 to 7, **characterized** in that the selected billing server (BS1-3) is responsible for verifying the client and the service provider and makes the payment to the service provider.

9. A method according to claim 8, **characterized** in that the billing server (BS1-3) collects the client's service payments it has made to different service providers and bills the client for them in a combined invoice at suitable intervals.

10. A method according to claim 9, **characterized** in that the client's service payments are billed in a service invoice of a telecommunications operator or a similar body with which the client has a service agreement.

11. A method according to claim 10, **characterized** in that the client's network address, telephone number or another identifier the client has received as a result of said service agreement is used as the client's identifier.

12. A communications system which comprises client devices, servers (SPS) of service providers and billing servers (BS1-3), which provide billing services, **characterized** in that

the billing server (BS1-3) or a separate directory server is arranged to transmit address data and service attributes of billing services to the service provider's server (SPS) in an advertising message,

the service provider's server (SPS) is arranged to select one billing service from among the advertised billing servers (BS1-3) for the billing transaction of a client according to the parameters given by the client or said service parameters or offer advertised billing services for the client to select,

the service provider's server (SPS) is arranged to initiate the billing transaction with the billing server (BS1-3) of the selected billing service by means of said address data and service attributes.

13. A system according to claim 12, **characterized** in that the selected billing server is responsible for verification of the client and the service provider and makes payment to the service provider.

14. A system according to claim 13, **characterized** in that the billing server (BS1-3) collects the client's service payments it has made to different service providers and bills the client for them in a combined invoice at suitable intervals.

15. A system according to claim 13 or 14, **characterized** in that the billing server (BS1-3) belongs to a telecommunications operator or a similar body with which the client has a service agreement and adds the payments made to an invoice in accordance with the service agreement.

5 16. A system according to claim 15, **characterized** in that the billing server (BS1-3) uses the client's network address, telephone number or another identifier the client has received as a result of said service agreement as the client's identifier.

10 17. A server of a service provider in a communications system, which comprises client devices, servers (SPS) of service providers and billing servers (BS1-3), which provide billing services, **characterized** in that

for the billing transactions of clients the server (SPS) uses billing services the address data and service attributes of which the server has received in advertising messages transmitted to the server,

15 the server (SPS) is arranged to select one billing service from among the advertised billing servers (BS1-3) for the billing transaction of a client on the basis of the parameters given by the client and said service attributes or offer advertised billing services for the client to select,

20 the server (SPS) is arranged to initiate a billing transaction with the billing server (BS1-3) of the selected billing service by means of said address data and service attributes.

18. A server according to claim 17, **characterized** in that the server (SPS) requests an advertising message by sending a billing service request which may include desired service attributes.

25 19. A server according to claim 17 or 18, **characterized** in that the server (SPS) performs the billing transaction according to the digital payment or billing protocol supported by the selected billing server and that the billing servers control this.

30 20. A server according to any one of claims 17 to 19, **characterized** in that the server's (SPS) billing software is limited to software which enables tracking and selection of a suitable billing server, handshaking with the selected billing server (BS1-3) and functioning as a party in the payment or billing procedure supported by the billing server.

35 21. A server according to any one of claims 17 to 21, **characterized** in that the server (SPS) configures with the payment or billing protocol supported by the billing server (BS1-3) on the basis of said service attrib-

utes received in the advertising message and/or on the basis of the data, file or software obtained after handshaking.

22. A method of billing services in a communications system, which comprises servers (SPS) of service providers and billing servers (BS1-3),
5 which provide billing services, **characterized** in that

the address data and service attributes of the billing services are transmitted in an advertising message to the service provider's server (SPS) over a telecommunication network,

employing said address data and service attributes the service provider's server (SPS) generates an electronic invoice form which corresponds to
10 the requirements of a billing service,

the service provider's server (SPS) adds its address and billing data and a link to the billing server (BS1-3) of said billing service to the electronic invoice form,

15 the service provider's server (SPS) transfers said electronic invoice form to a client device in response to a purchase transaction initiated by a client,

the client adds his billing data to said invoice form,

the invoice form filled in is transferred to the billing server indicated
20 by said link,

the billing server (BS1-3) makes payment from the client to the service provider, possibly communicating with the client device,

the billing server (BS1-3) sends an acknowledgement of the payment made to the client and/or the service provider's server (SPS).

25 23. A method according to claim 22, **characterized** in that said acknowledgement is sent to the client device as an electronic page which includes a link to the purchased service on the service provider's server (SPS),

30 the client places the actual order by activating said link to the service,

the service provider's server (SPS) checks whether an acknowledgement related to this order has been received from the billing server (BS1-3), and if this is the case, the server supplies the ordered service.

35 24. A method according to claim 22 or 23, **characterized** in that said electronic form and electronic page are implemented as World Wide Web (WWW) pages or as Wireless Application Protocol (WAP) pages.

25. A method according to claim 22, 23 or 24, **characterized** in that the service provider's server (SPS) downloads said electronic form from the billing server (BS1-3) by means of said address data and service attributes or generates an electronic invoice form by means of said service attributes.

5 26. A server of a service provider in a telecommunication system, which comprises client devices, servers (SPS) of service providers and billing servers (BS1-3), which provide billing services, **characterized** in that

10 for the billing transactions of clients the server (SPS) uses the billing services the address data and service attributes of which the server has received in advertising messages transmitted to it,

15 the server (SPS) is arranged to utilize said address data and service attributes to generate or download an electronic invoice form which corresponds to the requirements of a billing service and transfer said electronic invoice provided with its own billing information and a link directed to said billing service or transfer said electronic invoice provided with the address of the billing service to the client device for the client to fill in and for forwarding to said billing service.

20 27. A server according to claim 26, **characterized** in that the server (SPS) supplies the purchased service after it has received information on payment of the invoice from the billing server and/or the client device.

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